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Remarks

Claims 1-52 have been cancelled. Claims 53-59 are pending.

Claims 53-59 were rejected under 35 U.S.C.112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It was stated on page 2 of the Office Action that the terminology "unrelated to any endogenous RNA in the host" is a relative term and renders the claim indefinite. The term "unrelated to any endogenous RNA in the host" has been removed from claims 53, 54, 55, 57 and 58. Withdrawal of this ground of rejection is respectfully requested.

Claims 53-55 and 57-58 were rejected under 35 U.S.C.112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It was stated in the Office Action that there was insufficient antecedent basis for the limitation "the RNA in (a)". The term "the RNA in (a)" has been replaced with the term "the target mRNA in (a)" to clarify that there is sufficient antecedent basis for this term. Accordingly, withdrawal of this ground of rejection is respectfully requested.

Claims 53, 55 and 57 were rejected under 35 U.S.C.112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It was stated in the Office Action that the terminology "and are in proximity to a sequence homologous to all or part of the RNA in (a)..." is relative terminology which renders the claim indefinite. The term "in proximity" has been replaced with the term "operably linked". Support for this amendment can be found on page 22 at lines 24-28 of the specification. Thus, it is believed that no new matter has been added. Withdrawal of the rejection of claims 53, 55 and 57 under 35 U.S.C.112, second paragraph, is respectfully requested.

Claims 53 and 54 were rejected under 35 U.S.C.112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "the host " has been deleted from claims 53 and 54. Hence, withdrawal of this ground of rejection is respectfully requested.

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Claim 54 was rejected under 35 U.S.C.112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 54 has been amended to recite: "comprising at least nucleotides 7-36 or 7-36 and 44-73 of SEQ ID NO: 13.." and "comprising at least nucleotides 82-111 or 82-111 and 119-148 of SEQ ID NO: 13". Withdrawal of this ground of rejection is respectfully requested in view of this clarification.

Claim 55 was rejected under 35 U.S.C.112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 55 has been amended to recite that the "DNA sequence that has at least 80% sequence identity with all or part of a target DNA in soybean. . . ". Withdrawal of this ground of rejection is respectfully requested in view of this clarification.

Claim 56 was rejected under 35 U.S.C.112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 56 has been amended to correct the dependency. Withdrawal of this ground of rejection is respectfully requested.

Claim 58 was rejected under 35 U.S.C.112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 58 has been amended and recites now: "comprising at least nucleotides 7-36 or 7-36 and 44-73 of SEQ ID NO: 13.." and "comprising at least nucleotides 82-111 or 82-111 and 119-148 of SEQ ID NO: 13". Withdrawal of this ground of rejection is respectfully requested in view of the clarification.

Claims 53-54, 57 and 58 were rejected under 35 U.S.C. 112, first paragraph as failing to comply with the written description requirement on the ground that the recitation of specific portions of SEQ ID NO:13 appeared to constitute new matter in the absence of support in the specification and claims as originally filed.

It was stated on page 6 of the Office Action that Applicants previously had indicated in the response filed on October 29, 2004 that support for the newly added

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limitations of particular regions of SEQ ID NO: 13 could be found on page 18, lines 12-34 and page 2, lines 34-36.

Applicants indicated in response filed on October 21, 2005 that support for the particular regions of SEQ ID NO:13 could be found in Example 7 on page 37 at lines 1-22. The sequence recited in Claims 53-54 and 56-59 constitute sequences with a region unrelated to any endogenous RNA. Specifically, these sequences are 1X or 2X ELVISLIVES. The particular regions of SEQ ID NO: 13 recited in the claims encompass either 1XELVISLIVES (nucleotides 7-36 and 82-111 of SEQ ID NO:13) or 2XELVISLIVES (nucleotides 7-36, 44-73, 82-111 and 119-148 of SEQ ID NO:13) excluding the restriction enzyme sites shown in SEQ ID NO:13 (page 37, lines 14-21).

Accordingly, there is ample support in the specification as originally filed and withdrawal of the rejection of claims 53-54 and 56-59 on these grounds is respectfully requested.

Claims 53-59 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement on the ground that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The Examiner's attention is kindly invited to the discussion on page 13 of the specification at lines 24-30, where it is stated:

With respect to the degree of substantial similarity between the target (endogenous) mRNA and the RNA region in the construct having homology to the target mRNA, such sequences should be at least 25 nucleotides in length, preferably at least 50 nucleotides in length, more preferably at least 100 nucleotides in length, again more preferably at least 200 nucleotides in length, and most preferably at least 300 nucleotides in length; and should be at least 80% identical (*emphasis added*), preferably at least 85% identical, more preferably at least 90% identical, and most preferably at least 95% identical.

Furthermore it is stated on page 18 of the specification at lines 12-24 that :

Surprisingly and unexpectedly, it has been found that suitable nucleic acid sequences and their reverse complement can be used to alter the expression of any (*emphasis added*) homologous, endogenous RNA (i.e., the target mRNA) which is in proximity to the suitable nucleic acid sequence and its reverse complement. As is discussed below, the suitable nucleic acid sequence and its

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reverse complement can be either unrelated to any endogenous RNA in the host or can be encoded by any nucleic acid sequence in the genome of the host provided that nucleic acid sequence does not encode any target mRNA or any sequence that is substantially similar to the target mRNA.

Thus, the present invention presents a very efficient and robust approach to achieving single, or multiple, gene co-suppression using single plasmid transformation. As is discussed in greater detail below, the constructs are composed of promoters linked to mRNA(s) coding regions, or fragments thereof, that are targeted for suppression, and short complementary sequences that are unrelated to the targets.

In view of the above discussion and examples showing suppression of target mRNAs expressed in soybean using four different constructs and the declaration of Dr. Johan Stoop, one of ordinary skill in the art would readily recognize that the inventors were in possession of the constructs and RNAs that will function to reduce the expression of any target mRNA or any endogenous RNA expressed in soybean that has at least 80% sequence identity with a sequence homologous to all or a part of the RNA having homology to at least one target mRNA expressed in soybean.

It is respectfully submitted that the constructs of the invention are defined both in **structural** terms, namely, the constructs comprise promoters linked to mRNA(s) coding regions, or fragments thereof, that are targeted for suppression, and short complementary sequences (ELVISLIVES) and in **functional** terms, namely, the claimed constructs function to reduce expression of any target mRNA or any endogenous RNA expressed in soybean that has at least 80% sequence identity with a sequence homologous to all or a part of the RNA having homology to at least one target mRNA expressed in soybean. Withdrawal of the rejection of claims 53-59 under 35 U.S.C. 112, first paragraph, is respectfully requested.

Claims 53-59 were rejected under section 112, first paragraph (enablement). It is believed that all of the comments provided above are equally apposite with respect to this ground of rejection. Specifically, the disclosure in the specification coupled with the examples and the declaration provide specific guidance to one of ordinary skill as to which constructs are likely to lead to suppression of target (endogenous) mRNAs expressed in soybean. It is respectfully submitted that one of ordinary skill in the art could carry out the methods disclosed in the specification and examples without engaging undue experimentation.

In view of the foregoing, Applicants respectfully request withdrawal of the rejection of claims 53-59 under section 112, first paragraph (enablement) rejection.

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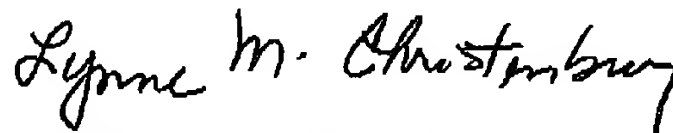
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It is respectfully submitted that the claims are now in form for allowance which allowance is respectfully requested.

A petition for a one (1) month extension of time accompanies this Response After Final.

Please charge any fees or credit any overpayment of fees which are required in connection with the filing of this Response After Final to Deposit Account No. 04-1928 (E. I. du Pont de Nemours and Company).

Respectfully submitted,



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